

ABSTRACT

The present invention relates to a process for preparing silica microcapsules and more particularly, to a process for preparing silica microcapsules comprising the steps of dissolving tetraethyl orthosilicate (TEOS) into an aqueous solution containing a hydrolysis catalyst to control a degree of hydrolysis and contribute hydrophilicity or lipophilicity, adding a core material and an appropriate amount of aminopropyltrialkoxysilane(APS) as a gelling agent into the solution, and emulsifying and dispersing the resulting solution to a solution having a polarity opposite to that of the core material to microcapsulate by coating the core material with silica shell via a sol-gel reaction. The process for preparing microcapsules of the present invention reduces environmental pollution compared to conventional processes using an alkali gelling agent such as an ammonia solution, and are suitable for both organic or inorganic core materials having hydrophilic or lipophilic property.